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(54) **A leaf seal**

(57) A leaf seal (131) is disclosed for effecting a seal between two coaxial and relatively rotating components. The seal has an annular pack (50) of stacked leaves (132), the pack (50) being mountable to a first one of the components at root portions (40) of the leaves (132) and extending towards the other component (51) such that end edges (136) of the leaves are presented for air-riding interaction with the other component (51) during relative rotation between the components. In use, a pressure drop is maintained axially across the pack (50). The pack (50) comprises a first set of leaves (132a) arranged around the pack, each of which is configured to present an end edge (136a) at least part of which is in intimate

relationship with the other component (51). The pack additionally comprises a second set of leaves (132b) circumferentially interspersed throughout the first set. The leaves of the first (132a) and second sets (132b) cooperate to define, around the pack, a plurality of circumferential spaces (54, 73, 76, 79, 81) between the end edges (136a) of successive leaves (132a) of the first set, said spaces (54, 73, 76, 79, 81) being configured to create a circumferential variation in pressure around the pack (50) which contributes to the generation of hydrodynamic lift (L) between the pack (50) and the other component (51) during relative rotation between the components.

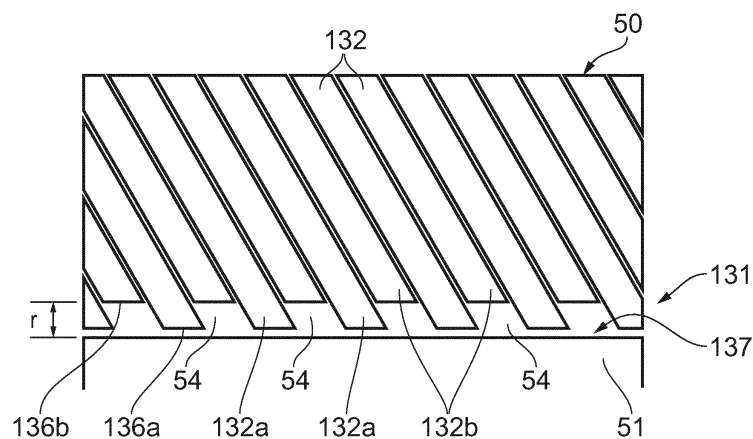


FIG. 4



EUROPEAN SEARCH REPORT

Application Number
EP 14 17 4644

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		15 April 2015	Narminio, Adriano
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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